

spind

12.0 4.50

Accept

\*N900040100\*

Setup Start \*NS1\*

Stop \*NS2\*

③

\*8\*

\*8\*

Customer:

Run Start \*NR1\*

Date: 12/04/18 Tooling:

Date:

Stop \*NR2\*

Date:                      SPC (Y/N):

Date:

### Operation Description

Set Up/  
Run Hours

Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
---------	--------	--------------	---------------	---------------	------------------	----------------

Revision Nbr

D3137

Rev F

0.00

\*100\*

BAND SAW

0.00

Bandsaw

## Memo

Jeaspa Bandsaw

Cut blanks: (.500" x 2.000") 5.570" long

0.00

110

\*110\*

## HAAS CNC VERTICAL MACHINING #1

0.00

HAAS I

## Memo

HAAS CNC vertical machine #1

1-Machine D3137-7 as per Folio FA3308 and Dwg D3137 Identify as D3137-72-Debur3-Scribe batch number

0.00

120

\*120\*

QC2- Inspect parts off machine FAI/FAIB

0.00

OC

## Memo

### Quality Control



Work Order ID 83467

April-18-12 2:39:00 PM

\*83467\*

Page 2

Item ID: D3137-043

Revision ID:

Item Name: Bracket Assembly

Start Date: 18/04/2012 Start Qty: 8.00

Required Date: 02/05/2012 Req'd Qty: 8.00

Reference:

Accept

\*N900040100\*

Setup Start \*NS1\*

Stop \*NS2\*

Cust Item ID:

Customer:

Approvals:

Process Plan:

Date:

Tooling:

Date:

Run Start \*NR1\*

QC:

Date:

SPC (Y/N):

Date:

Stop \*NR2\*

Sequence ID/  
Work Center ID

Operation  
Description

Set Up/  
Run Hours

Tool ID

Tool #

Plan  
Code

Accept  
Qty

Reject  
Qty

Reject  
Number

Insp.  
Stamp

130

QC8- Inspect parts - second check

0.00

3L 12-06-11

\*130\*

QC

Memo

0.00

Quality Control

140

Small Fab

0.00

\*140\*

Small Fab

Memo

0.00

Small Fab

Assemble D3137-043 as per Dwg D3137

3x

EB 12/06/11

150

QC5- Inspect part completeness to step on W/O

0.00

\*150\*

QC

Memo

0.00

Quality Control

3

8 12/06/11





Work Order ID 83467

\*83467\*

Page 3

Item ID: D3137-043

Accept

\*N9000040100\*

Setup Start \*NS1\*

Revision ID:

Stop \*NS2\*

Item Name: Bracket Assembly

Start Date: 18/04/2012 Start Qty: 8.00

\*8\*

Required Date: 02/05/2012 Req'd Qty: 8.00

\*8\*

Cust Item ID:

Customer:

Reference:

Approvals: Process Plan:

Date:

Tooling:

Date:

Run Start \*NR1\*

QC:

Date:

SPC (Y/N):

Date:

Stop \*NR2\*

Sequence ID/  
Work Center ID

Operation  
Description

Set Up/  
Run Hours

Tool ID Tool # Plan  
Code Accept  
Qty Reject  
Qty Reject  
Number Insp.  
Stamp

160

Identify as per dwg & Stock Location: 235B

0.00

\*160\*

Packaging

Memo

0.00

Packaging

170

QC21- Final Inspection - Work Order Release

0.00

\*170\*

QC

Memo

0.00

Quality Control

12/6/11 (3)

12/6/11

ME  
12-06-11





# Picklist Print

April-18-12 2:39:04 PM

Page 1

Work Order ID: 83467

\*83467\*

Parent Item: D3137-043

\*D3137-043\*

Parent Item Name: Bracket Assembly

Start Date: 18/04/2012

Required Date: 02/05/2012

Start Qty: 8.00

Required Qty: 8.00

## Comments:

IPP Rev: A04.02.18 New Issue KJ/DS

IPP Rev B 08.07.03 ECN1207 EC Verified by DD

Component Item ID/ Item Name	Replacement Item ID	Mfg/ Purch	Bin Item	Primary Location	Last Location	Route Seq ID	Unit of Measure	Qty on Hand	Qty per Kit	Total Qty	Qty Issued	Date Issued	Status
---------------------------------	------------------------	---------------	-------------	---------------------	------------------	-----------------	--------------------	----------------	-------------	--------------	---------------	----------------	--------

MS24694-S101

Purchased

No

100

Each

13.0000

1

8

\*MS24694-S101\*

Screw

\*\*

EP 12/06/11

### Location

### Loc Qty

### Loc Code

ST290A

13

120498

13

D3137-3

Manufactured

No

140

Each

30.0000

1

8

\*D3137-3\*

Guide

\*\*

EP 12/06/11

### Location

### Loc Qty

### Loc Code

ST235A

30

76873

1

79735

29

D3137-5

Manufactured

No

140

Each

6.0000

1

8

\*D3137-5\*

Washer

\*\*

EP 12/06/11

### Location

### Loc Qty

### Loc Code

ST235A

6

46740

3

77022

3





# Picklist Print

April-18-12 2:39:04 PM

Page 2

Work Order ID: 83467

Parent Item: D3137-043

Parent Item Name: Bracket Assembly

\*83467\*

\*D3137-043\*

Start Date: 18/04/2012

Required Date: 02/05/2012

Start Qty: 8.00

Required Qty: 8.00

M174B0.500X02.000

Purchased

No

140

f

40.3271

0.4643

3.909895

\*M174B0 500X02 000\*

17-4 SS Bar .500 x 2.00

\*\*

## Location

MAT050

100843

103089

14932

19572

## Loc Qty

40.3271

8.012

13

17.9051

1.41

## Loc Code

5.9 12/04/29

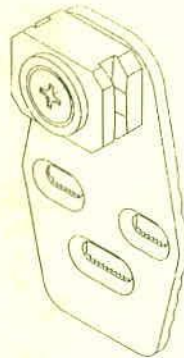
April-18-12 2:39:04 PM

Shop Packet Print

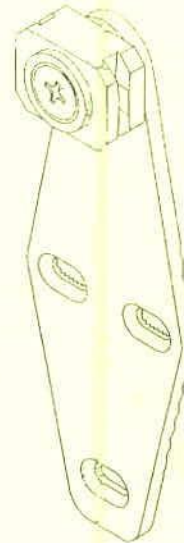
Page 2



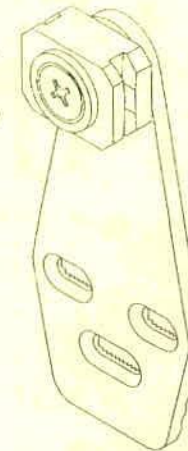
SHOP COPY  
 RETURN TO  
 ENGINEERING  
 UNCONTROLLED COPY  
 SUBJECT TO AMENDMENT  
 WITHOUT NOTICE  
 WORK ORDER  
 NO. 83467 MJS  
 12/04/18



D3137-041 BRACKET ASSEMBLY



D3137-043 BRACKET ASSEMBLY



D3137-045 BRACKET ASSEMBLY

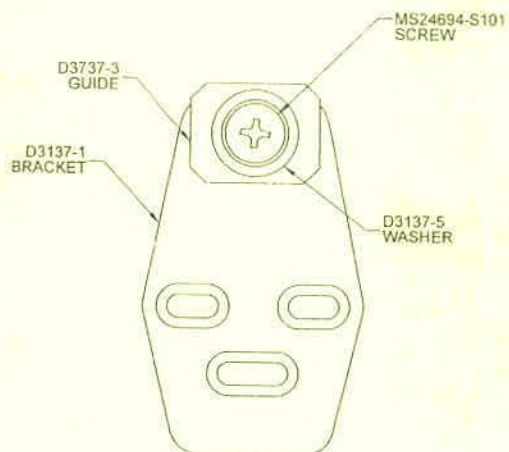
RELEASE  
 06-06-2018

F	RE-DRAWN & REFORMATTED IN SOLIDWORKS. SHEET 3 ZONE A 5 DIM 2.38 WAS 2.48. ZONE A 4 0.480 DIM WAS 0.505. ZONE A 9 0.67 DIM WAS 0.79. ZONE B 5 4.850 DIM WAS 4.975 & ZONE B 8 5.29 DIM WAS 5.41. REASON: PART TRIMMED DUE TO INTERFERENCE WITH EXECUTIVE INTERIOR.	AJS	08.05.30
E	ADD -045	RF	05.11.23
D	RE-DESIGN D2137-5; CHANGE DIMS	DS	04.11.03
C	ADD -043	DS	03.09.15
B	ADD RIDGES; ADD MATERIAL PROP	DS	03.01.16
A	NEW ISSUE	DS	02.04.17
REV	DESCRIPTION	BY	DATE
DESIGN	DS	<b>DART AEROSPACE LTD</b> HAWKESBURY, ONTARIO, CANADA DRAWING NO. <b>D3137</b> REV. F SHEET 1 OF 5 TITLE <b>BRACKET ASSEMBLY</b> SCALE NTS COPYRIGHT © 2002 BY DART AEROSPACE LTD <small>THIS DRAWING IS PRIVATE AND CONFIDENTIAL AND IS SUPPLIED UNDER THE EXPRESS CONDITION THAT IT IS NOT TO BE USED FOR ANY PURPOSES OTHER THAN FOR WHICH IT WAS ORIGINALLY DESIGNED WITHOUT THE WRITTEN PERMISSION FROM DART AEROSPACE LTD</small>	
DRAWN	AJS		
CHECKED			
MFG APPR			
APPROVED			
DE APPR			
DATE	08.05.30		

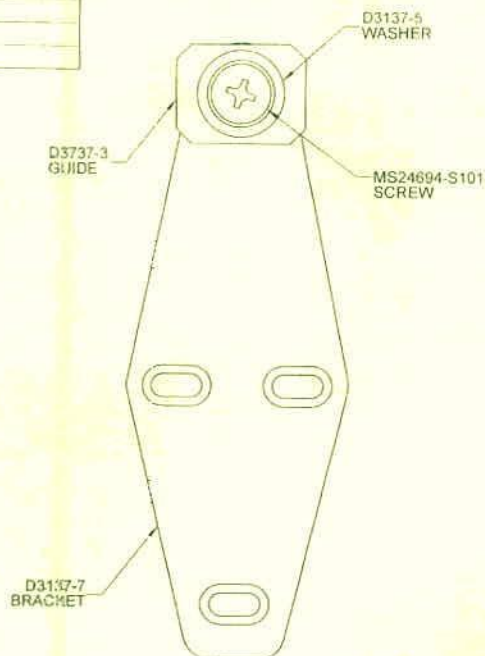




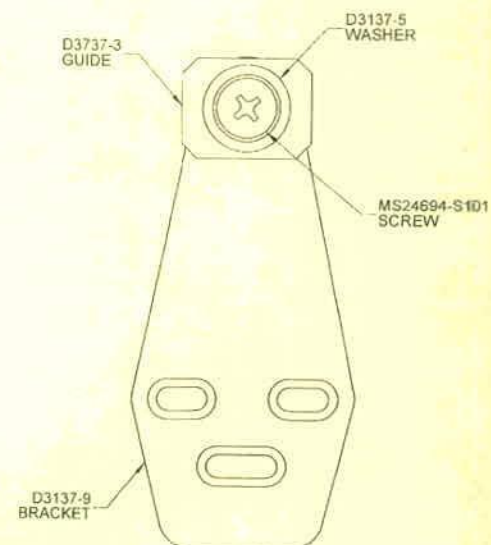
QTY. -041	QTY. -043	QTY. -045	PART NUMBER	DESCRIPTION
X			D3137-041	BRACKET ASSEMBLY
	X		D3137-043	BRACKET ASSEMBLY
		X	D3137-045	BRACKET ASSEMBLY
1			D3137-1	BRACKET
1	1	1	D3137-3	GUIDE
1	1	1	D3137-5	WASHER
	1		D3137-7	BRACKET
		1	D3137-9	BRACKET
1	1	1	MS24694-S101	SCREW



**D3137-041 BRACKET ASSEMBLY**



**D3137-043 BRACKET ASSEMBLY**



**D3137-045 BRACKET ASSEMBLY**

**NOTES:**

- 1) MATERIAL: N/A
- 2) FINISH: NONE
- 3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
- 4) UNITS: INCHES UNLESS OTHERWISE NOTED
- 5) BREAK SHARP EDGES: N/A
- 6) IDENTIFICATION: N/A
- 7) WEIGHT: 0.18 lbs -041  
0.32 lbs -043  
0.27 lbs -045

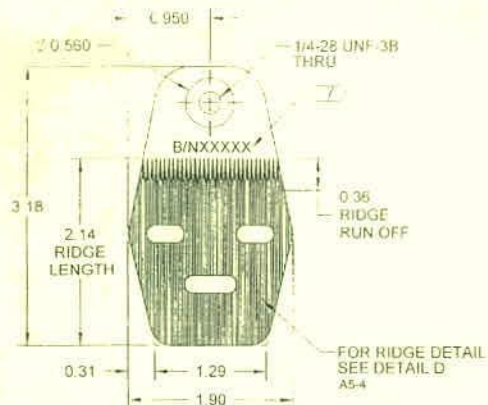
**RELEASED**  
08.06.16/10

DESIGN	DS	<b>DART AEROSPACE LTD</b>	
DRAWN	AJS	HAWKESBURY, ONTARIO, CANADA	
CHECKED		DRAWING NO.	REV. F
MFG APPR.		D3137	SHEET 2 OF 5
APPROVED		TITLE	SCALE
DE APPR.		BRACKET ASSEMBLY	NTS
DATE	08.05.30	COPYRIGHT © 2002 BY DART AEROSPACE LTD	

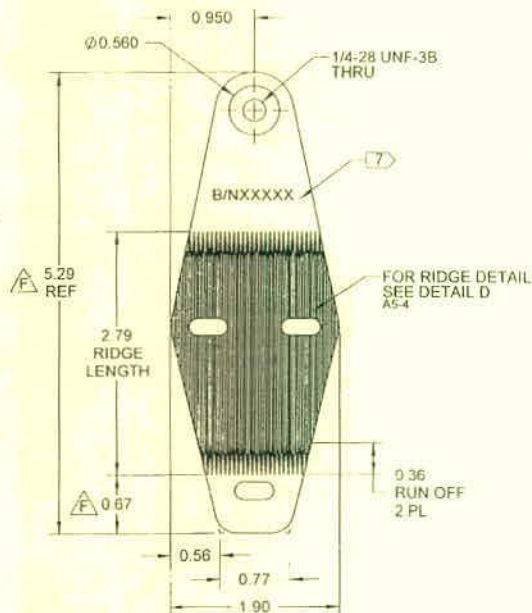
83467



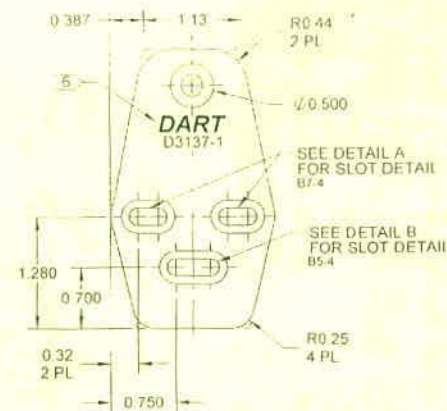
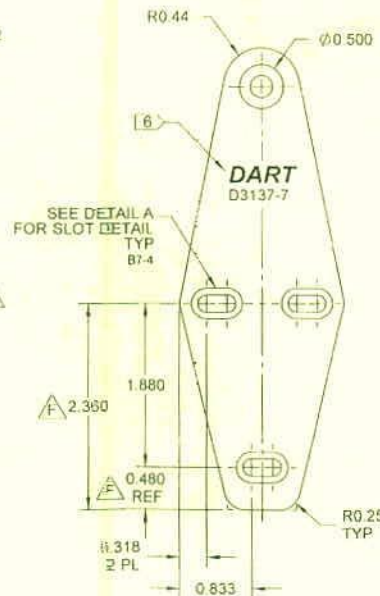
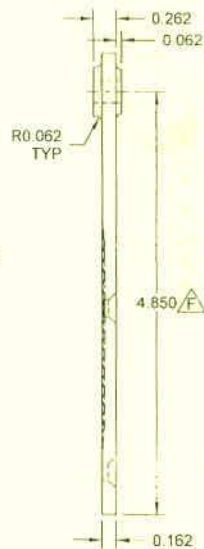
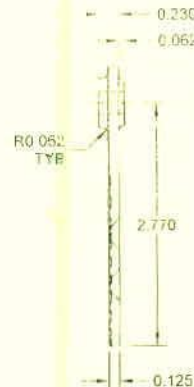




D3137-1 BRACKET



D3137-7 BRACKET



#### NOTES

- 1) MATERIAL -1 & -7  
17-4PH STAINLESS STEEL  
PER AMS 5604 OR 5643  
MIN ULTIMATE TENSILE = 150 ksi  
MIN YIELD TENSILE = 100 ksi  
PER DART SPEC. M17-4-B
- 2) FINISH: NONE
- 3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
- 4) UNITS: INCHES UNLESS OTHERWISE NOTED
- 5) BREAK SHARP EDGES: 0.005 TO 0.015 MAX
- 6) IDENTIFICATION: ENGRAVE DART LOGO USING 0.20 HIGH LETTERS & P/N WITH USING .15 HIGH LETTERS TO A MAX. DEPTH OF 0.010
- 7) SCRIBE WITH DART B/N USING VIBRATING STYLUS
- 8) WEIGHT: SEE ASSEMBLED WEIGHT ON SHEET 2
- 9) -1 REPLACES PREMIER P/N B30-23000-105/-1-B

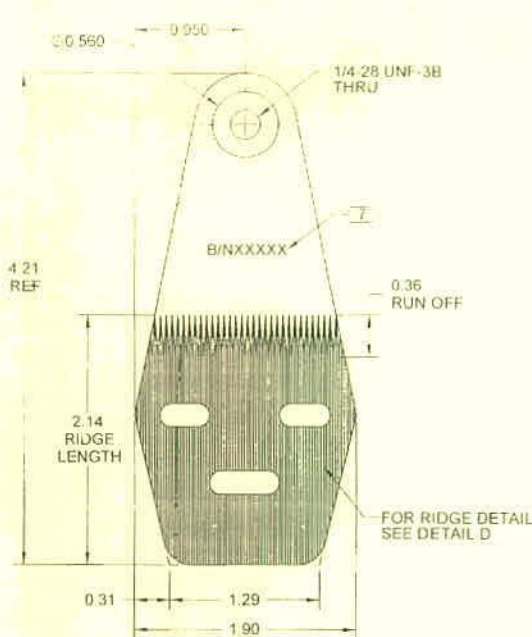
RELEASED  
08.04.26.11/10

DESIGN	DS	DART AEROSPACE LTD	
DRAWN	AIS	HAWKESBURY, ONTARIO, CANADA	
CHECKED		DRAWING NO.	REV. F
MFG. APPR		D3137	SHEET 3 OF 5
APPROVED		TITLE	SCALE
DE APPR		BRACKET ASSEMBLY	NTS
DATE	08.05.30	COPYRIGHT © 2002 BY DART AEROSPACE LTD	

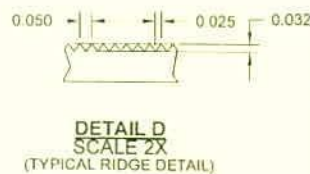
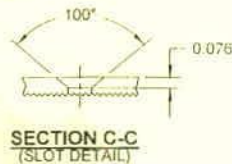
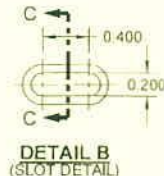
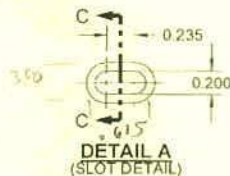
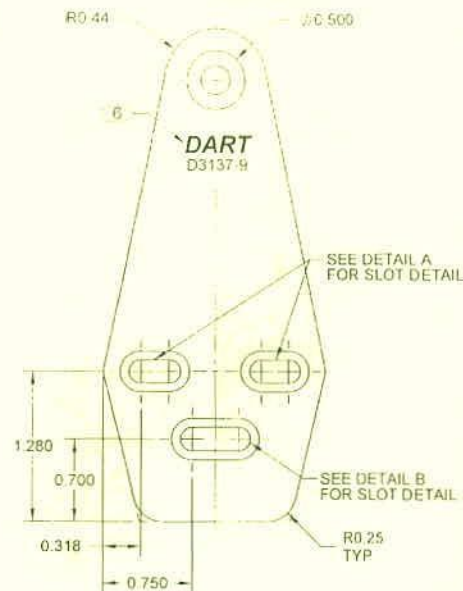
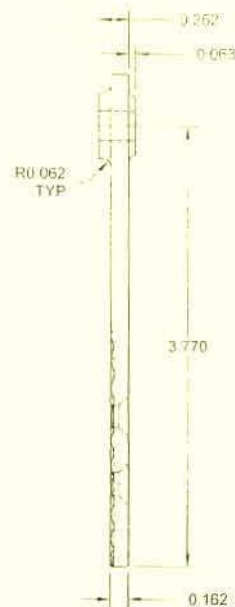




83467



**D3137-9 BRACKET**



**NOTES:**

- 1) MATERIAL: 17-4PH STAINLESS STEEL  
PER AMS 5604 OR 5643  
MIN ULTIMATE TENSILE = 150 ksi  
MIN YIELD TENSILE = 100 ksi  
PER DART SPEC. M17-4-B
- 2) FINISH: NONE
- 3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
- 4) UNITS: INCHES UNLESS OTHERWISE NOTED
- 5) BREAK SHARP EDGES: 0.005 TO 0.015 MAX
- 6) IDENTIFICATION: ENGRAVE DART LOGO USING 0.20 HIGH LETTERS & P/N WITH USING 15 HIGH LETTERS TO A MAX. DEPTH OF 0.010
- 7) SCRIBE WITH DART B/N USING VIBRATING STYLUS
- 8) WEIGHT: SEE ASSEMBLED WEIGHT ON SHEET 2
- 9) REPLACES PREMIER P/N B30-23000-105/106

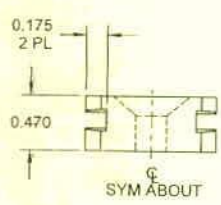
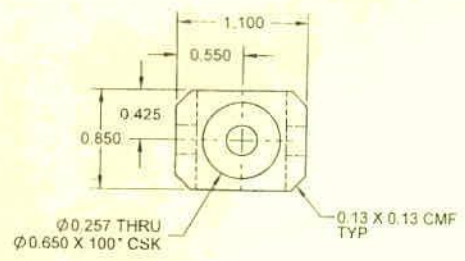
DESIGN	DS	<b>DART AEROSPACE LTD</b>	
DRAWN	AJS	HAWKESBURY, ONTARIO, CANADA	
CHECKED		DRAWING NO.	REV. F
MFG APPR.		D3137	SHEET 4 OF 5
APPROVED		TITLE	SCALE
DE APPR.		BRACKET ASSEMBLY	NTS
DATE	08.05.30	COPYRIGHT © 2002 BY DART AEROSPACE LTD	

THIS DOCUMENT IS UNCLASSIFIED AND CONFIDENTIAL. IT IS SUPPLIED TO THE PUBLIC UNDER THE ACCESS TO INFORMATION ACT. IT IS NOT TO BE REPRODUCED OR TRANSMITTED IN ANY FORM OR BY ANY MEANS, ELECTRONIC OR MECHANICAL, INCLUDING PHOTOCOPYING, RECORDING, OR BY ANY INFORMATION STORAGE AND RETRIEVAL SYSTEM, WITHOUT PERMISSION IN WRITING FROM DART AEROSPACE LTD.

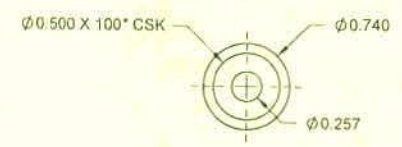
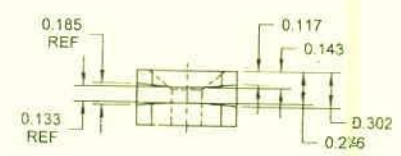




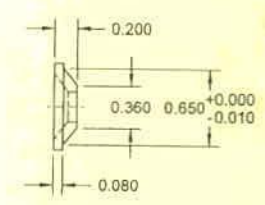
83467



**D3137-3 GUIDE**



**D3137-5 WASHER**



**NOTES**

- 1) MATERIAL: -3  
DELIN II 150E OR ACETRON GP ACETAL, BAR  
(REF DART SPEC M-DELIN-B)  
-5  
6061-T6 (OR 6061-T651/ T6510/ T6511/ T62) ALUMINUM BAR  
PER-AMS-QQ-A-225/B (OR AMS 4117/ 4128/ 4145/ 4116)  
OR PER-QQ-A-200/B (OR AMS 4160)  
REF. DART SPEC M6061T6R
- 2) FINISH: CHEMICAL CONVERSION COAT PER DART QSI 005 4.1 (-5 ONLY)
- 3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
- 4) UNITS: INCHES UNLESS OTHERWISE NOTED
- 5) BREAK SHARP EDGES: 0.005 TO 0.015 MAX
- 6) IDENTIFICATION: NONE
- 7) WEIGHT: SEE ASSEMBLED WEIGHT ON SHEET 2
- 8) -3 REPLACES PREMIER P/N B30-2300-207  
-5 REPLACES PREMIER P/N B30-2300-209

**RELEASED**

DESIGN	DS	<b>DART AEROSPACE LTD</b>	
DRAWN	AJS	HAWKESBURY, ONTARIO, CANADA	
CHECKED		DRAWING NO.	REV. F
MFG. APPR.		D3137	SHEET 5 OF 5
APPROVED		TITLE	SCALE
DE APPR.		BRACKET ASSEMBLY	NTS
DATE	08.05.30	COPYRIGHT © 2002 BY DART AEROSPACE LTD THIS DOCUMENT IS PRIVATE AND CONFIDENTIAL AND IS SUPPLIED ON THE EXPRESS UNDERSTANDING THAT IT IS NOT TO BE REPRODUCED OR TRANSMITTED IN ANY FORM OR BY ANY MEANS, ELECTRONIC OR MECHANICAL, INCLUDING PHOTOCOPYING, RECORDING, OR BY ANY INFORMATION STORAGE AND RETRIEVAL SYSTEM, WITHOUT THE WRITTEN PERMISSION OF DART AEROSPACE LTD.	

1870

1871

1872

1873

1874

1875

1876

1877

1878

1879

1880

1881

1882

1883

1884

1885

1886

1887

1888

1889

1890

1891

1892

1893

1894

1895



DART AEROSPACE LTD		Work Order: 83467
Description:		Part Number: D337-7
Inspection Dwg:	Rev:	Page 1 of 1

### FIRST ARTICLE INSPECTION CHECKLIST

Drawing Dimension	Tolerance	Actual Dimension	Accept	Reject	Method of Inspection	Comments
1.900	+/- .030	1.890	✓		SLO9	Vern
.77	+/- .030	.770	✓			
.56	+/- .030	.560	✓			
Ø .560	+/- .010	Ø .563	✓			
.950	+/- .010	.9445	✓		Height gauge	
1/4-28 NF		1/4-28	✓		Thread gauge	
.262	+/- .010	.260	✓		Height gauge	
.062	+/- .010	.063	✓			
R.062	+/- .010	R.062	✓		Rad gauge	
4.850	+/- .010	4.8515	✓		SLO8	
.162	+/- .010	.162	✓			
Ø .500	+/- .010	Ø .504	✓			
1.880	+/- .010	1.880	✓		Height gauge	
2.360	+/- .010	2.360	✓			
.318	+/- .010	.3145	✓			
.833	+/- .010	.833	✓			
R.250	+/- .010	R.250	✓		Rad gauge	
.200	+/- .010	.203	✓		SLO8	
.235	+/- .010	.229	✓			
.076	+/- .010	.079	✓			
.032	+/- .010	.028	✓			

Measured by: <i>[Signature]</i>	Audited by: <i>[Signature]</i>	Preliminary Approval: <i>[Signature]</i>
Date: 12/06/08	Date: 12-06-11	Date:

Rev	Date	Change	Revised by	Approved
E	10.04.14	Added preliminary approval	KJ	

*[Signature]* 10.04.15

